

Welcome to the

44th Annual

Environmental Show of the South

April 22-24, 2015

Gatlinburg Convention Center



Environmental Law Session
endorsed by



Welcome to the 44th Annual Environmental Show of the South

Schedule of Events

Wednesday, April 22, 2015

- 7:30 a.m. Registration opens; Breakfast available in the Exhibit Hall
- 9:00 a.m. Opening session begins in Hall 3; Exhibit Hall closes temporarily
- 11:00 a.m. All adjourn to the Exhibit Hall
- 11:30 a.m. Lunch is served in Hall 3
- 1:00 p.m. First round of breakout sessions begin
- 2:30 p.m. Networking break in the Exhibit Hall
- 3:00 p.m. Breakout sessions resume
- 4:30 p.m. Breakout sessions close
- 5:00 p.m. Welcome Reception held in the Exhibit Hall

Thursday, April 23, 2015

- 7:30 a.m. Breakfast available in the Exhibit Hall
- 8:00 a.m. Second round of breakout sessions begin
- 9:30 a.m. Networking break in the Exhibit Hall
- 10:00 a.m. Breakout sessions resume
- 11:30 a.m. Lunch is served in Hall 3
- 1:00 p.m. Third round of breakout sessions begin
- 2:30 p.m. Ice Cream Social held in the Exhibit Hall; prize drawings held
- 3:15 p.m. Breakout sessions resume
- 4:45 p.m. Breakout sessions conclude

Friday, April 24, 2015

- 7:30 a.m. Breakfast available in Hall 3; Feedback forms collected for final prize drawing
- 8:15 a.m. Closing session begins in Hall 3
- 11:00 a.m. 44th Environmental Show of the South concludes

Professional Development

Landfill Operators earn one credit hour of state approved training for each hour spent in the Solid Waste Sessions (up to 9 hours). Credit may also be earned for some parts of the Waste Reduction and Recycling Sessions. Be sure to get a form in each session you attend to claim this credit.

SWANA Members can earn Continuing Education Units (CEUs) for relevant technical sessions. CEU forms will be available at the TN SWANA Booth (704) in the Exhibit Hall and in the sessions.



Professional Engineers can earn Professional Development Hours (PDHs) at the conference. Engineers must keep their own records, including a marked copy of the agenda indicating items attended, their paid receipt, and their name badge. If desired, Certificates of Attendance may be purchased.

Attorneys can earn Continuing Legal Education (CLE) credits through the Tennessee Bar Association. Attorneys who wish to receive CLE credit must complete a form in the Environmental Law Sessions documenting session attendance and pay an additional fee (see On-Site Registration).



Certified Hazardous Materials Managers/Practitioners can earn up to five Certification Maintenance Points (CMPs) per day. CHHMs and CHMPs are responsible for their own recordkeeping and must keep their name badges and agendas. If desired, Certificates of Attendance may be purchased.

Professional Geologists should verify continuing education requirements with their state of licensure. Neither TN nor GA require documentation at present.

Certificates of Attendance can be purchased for \$10. Certificates can be picked up on site on April 24 or will be mailed after the conference.

At a Glance

Plenary Sessions

The Opening and Closing Sessions will be held in Hall 3 on the Lower Level. All attendees and booth workers are encouraged to attend these events. Lunches will also be served in this room. See pages 3 and 17 for additional details on the Plenary Sessions.

Breakout Sessions

Three rounds of breakout sessions will be held during the conference, with five to six options each, so attendees have plenty of variety to choose from. While all breaks are synchronized, presentation start times may vary between breakouts. Breakouts will take place on the Upper Level of the Convention Center. A quick reference table is provided in the middle of this program—see pages 12-13. An app is also available for your Apple iOS or Android mobile devices, courtesy of Burr & Forman and developed by BDY Environmental.

Exhibit Hall

This year's event features over 110 exhibitors in Halls 1 and 2 on the Lower Level. The Exhibit Hall will host all technical session breaks, a Welcome Reception Wednesday evening, and the Ice Cream Social on Thursday afternoon. Thanks to our generous sponsors, attendees visiting the Exhibit Hall can enter to win several great prizes, including a big screen HDTV and iPad! See page 4 for details, and check out our Exhibitor Directory on pages 18-23.

**A special thank you
to our sponsors:**



- 9:00 AM-9:05 AM** **44th Annual Environmental Show of the South Begins**
- 9:05 AM-9:15 AM** **Opening Remarks**
Patrick J. Flood, P.E., Director, TDEC - Division of Solid Waste Management
- 9:15 AM-9:35 AM** **Welcome to TDEC's 44th Annual Environmental Show of the South**
Robert J. Martineau, Jr., Commissioner of the Tennessee Department of Environment and Conservation, will discuss trends, opportunities, and innovations impacting TDEC and Tennessee in his welcome address.
- 9:35 AM-10:00 AM** **EPA Update and Highlights**
Jon D. Johnston, Materials and Waste Management Branch Chief for U.S. Environmental Protection Agency Region 4, will provide a summary of recent EPA initiatives, accomplishments, priorities and highlights.
- 10:00 AM-10:50 AM** **Keynote Address:**
The Future of the Waste Industry, Current Trends in Waste and Recycling, and How They Are Affecting Industry and Government
Sharon H. Kneiss, President and CEO of the National Waste & Recycling Association, the trade association representing for-profit waste and recycling companies in the U.S., will open ESOS 2015 as our Keynote Speaker.
- 10:50 AM-11:00 AM** **Morning Announcements**
Patrick J. Flood, P.E., Director, TDEC - Division of Solid Waste Management
- 11:00 AM-11:30 AM** **Exhibit Hall Excursion**
All adjourn to the Exhibit Hall next door while the lunch buffet is set out.
- 11:30 AM-1:00 PM** **Lunch served in Hall 3**

Robert J. Martineau, Jr., TDEC



Robert "Bob" Martineau, Jr. was selected seventh Commissioner of TDEC by Governor Bill Haslam in January 2011. He leads TDEC with a results-focused approach emphasizing outstanding customer service, outreach and proactive education, and effective partnerships to strengthen environmental protection in TN.

His environmental leadership at TDEC has been recognized at the national level as he was elected by his peers as President for the Environmental Council of the States, the national association of state environmental officers. Commissioner Martineau spent more than 30 years as an attorney in the field of environmental law. He earned his law degree at the University of Cincinnati and holds an undergraduate degree from St. John's University (MN).



Jon D. Johnston, U.S. EPA



Jon D. Johnston is a 1979 biology / marine sciences graduate of the University of West Florida. He is currently responsible for several elements of EPA Region 4's RCRA solid and hazardous waste programs and TSCA regulation and cleanup of PCBs. He

is a leader in the Agency's sustainable materials management program, changing the Agency's focus from waste management to sustainability, pollution prevention, waste minimization and economically beneficial reuse of materials. He is a national advocate of sustainable materials management and the zero waste strategy for government, businesses and citizens.

A thirty-eight year veteran of the EPA, Jon has been recognized with numerous awards including the Agency's Gold Medal for implementation of the Resource Conservation Challenge that led to the creation of the Agency's sustainable materials management program.



Keynote Speaker: Sharon H. Kneiss, NW&RA



Sharon H. Kneiss is the president and CEO of the National Waste & Recycling Association.

Kneiss has more than 30 years of business, management and advocacy experience relating to environmental policy at the federal and state levels. She served as vice president, products division with the American Chemistry Council (ACC). Kneiss previously served in a management capacity at the American Forest & Paper Association and in policy advocacy roles at Chevron Corporation, Hercules Inc. and the American Petroleum Institute. She has a Bachelor of Science in Chemistry from the University of Scranton and a Master of Business Administration from the University of Pittsburgh.



About the NW&RA

The NW&RA provides advocacy, research, education and safety expertise to promote the waste and recycling industries. It works to reduce injuries through its training materials and seminars, its equipment and facility safety standards, and its new driver-certification program. NW&RA also provides valuable information through educational sessions, newsletters, market statistics and data program, industry reports, and websites.



1:00 PM-1:10 PM	Moderator Jason Repsher, Division of Solid Waste Management, opens the session
1:10 PM-2:00 PM	The Effect of the Proposed NSPS/EG Rules for Landfills On July 14, 2014 the EPA published a proposed new NSPS for landfills and a notice of possible changes to the Emission Guidelines (EG) for landfills. The proposed new NSPS as well as the potential changes to the EG for landfills is set to be published in 2015. This presentation will give the status and potential effect of these proposed rules on landfills and discuss who will be subject to NSPS XXX. David G. Thorley , Waste Management Matt K. Stutz, P.E. , Weaver Consultants Group
2:00 PM-2:30 PM	Landfill Stability - Causes and Predictors Steve Batiste, P.E. , Brown and Caldwell
2:30 PM-3:00 PM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)
3:00 PM-3:40 PM	Final Cover Systems - Design vs. Performance Steve Batiste, P.E. , Brown and Caldwell
3:40 PM-4:20 PM	Shingle Recycling: Collecting, Recycling, and Handling of Asphalt Shingles For most landfills, shingles can be a huge problem contributing to a large portion of air space. Learn more about ways to handle asphalt shingles and the hard-to-recycle products. Lincoln Young , Ground Up Recycling Matt Allen , Ground Up Recycling
4:20 PM-4:30 PM	Session Close
5:00 PM-6:30 PM	Welcome Reception hosted by Republic Services in the Exhibit Hall (Lower Level)

Exhibit Hall Features & Sponsor Acknowledgements

The Exhibit Hall is open from 7:30 a.m. to 6:30 p.m. on Wednesday, April 22 and from 7:30 a.m. to 3:15 p.m. on Thursday, April 23. Over 110 organizations are exhibiting, so be sure to visit early and often for these opportunities!

Welcome Reception – Wednesday Evening

Join us for a welcome reception in the Exhibit Hall, Wednesday, April 22 starting at 5:00 p.m. **Hospitality sponsored by Republic Services, Inc.**



HDTV Giveaway –

Entering to win is simple: take your entry form to the Exhibit Hall while you visit the booths and have it stamped at each one. Drop the completed entry form in the basket in the Exhibit Hall break area by 2:20 p.m. on Thursday afternoon. The TV giveaway is sponsored by Weaver Consultants Group.



Scavenger Hunt –

Two lucky attendees who find all 25 shapes hidden in the exhibitor displays will win \$150. Completed entry forms must be dropped in the break area of the Exhibit Hall by 2:20 p.m. on Thursday afternoon. The Scavenger Hunt is sponsored by NorthStar and Pratt.



Exhibitor Feedback Prize –

Exhibitors who complete and return their feedback forms by 2:20 p.m. on Thursday afternoon will be entered to win a Samsonite Xenon 2 Spinner Mobile Office PFT. This prize is sponsored by Red River Waste Solutions, LP.



Our thanks to Winter Systems for providing the conference lanyards.

Ice Cream Social – Thursday Afternoon

Join us for the Ice Cream Social during the Thursday afternoon networking break starting at 2:30 p.m. Prize drawings will take place at 3:00 p.m., and you must be present to win. **Hospitality sponsored by HEPACO, LLC.**



Want to get outside?

Who can visit the Smokies in spring and not take a walk to absorb the loveliness of the wildflowers? Take a break and let Stantec's scientists take you on a short walk starting at 3 p.m. on Wednesday to see spring's handiwork up close. Stantec will lead the first 16 attendees who sign up at their booth for this hour-long, unforgettable nature walk.



Attendee Feedback Prize –

We want to hear from you! Give us your feedback and be entered to win a two night stay at a Tennessee State Park or an iPad Air 2. Completed feedback forms must be received by 10:30 a.m. on Friday, April 24. Forms may be turned in at the Exhibit Hall break area or to On-Site Registration. The drawings will take place during the Closing Session. Must be present to win the iPad Air sponsored by Stantec.



Our thanks as well to Burr & Forman for sponsoring our mobile app and BDY Environmental for developing it.



BDY Environmental

Thursday, April 23

Solid Waste Session

Rooms 1-3 (Upper Level)

8:00 AM-8:10 AM	Moderator Jeff Norman, TDEC - Solid Waste Management, opens the session
8:10 AM-8:50 AM	Leachate Spray Mist Evaporation System This will be a continuation of the 2014 presentation regarding the spray mist evaporation system located at Meadow Branch landfill. System performance data will be presented, as well as lessons learned from operation in differing climates and next steps in the evolution of the process. Nelson Lawrence Breeden, P.E. , Waste Connections Inc. Robert Bachus, Ph.D., P.E. , Geosyntec Consultants Steve Keylor , Waste Connections-Meadow Branch Landfill
8:50 AM-9:30 AM	Landfill Bioreactor Waste Mining and Reclamation - Williamson County Landfill This will be a presentation of proposed landfill mining and materials reclamation of the aerobic/anaerobic landfill bioreactor operated from 2000 to 2015. Nancy Zion , Williamson County Solid Waste Jo Kendall House, P.E., P.G. , House Engineering, LLC Kevin Brian Wolfe, Ph.D., P.E. , Civil & Environmental Consultants, Inc.
9:30 AM-10:00 AM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)
10:00 AM-10:40 AM	Design of Landfill Sediment Ponds for Optimal Performance Owners and designers are challenged with numerous regulatory requirements for landfill sediment ponds. With a little long-term planning and understanding of pond hydraulics, ponds can meet water quality standards while minimizing undue strain on the landfill operator. Rob Witcher, P.E. , Promus Engineering LLC
10:40 AM-11:20 AM	Construction Challenges of a Coal Ash Landfill Expansion Between 2010 and 2014, CEC provided permitting, engineering and construction quality assurance services for TVA's Phase III expansion at the Bull Run Fossil Plant. This presentation will discuss the challenges faced during the design and construction and how they were overcome. George "Willy" White , Civil & Environmental Consultants, Inc. Brian Wolf, P.E. , Civil & Environmental Consultants, Inc.
11:20 AM-11:30 AM	Session close
11:30 AM-1:00 PM	Networking Break—Lunch served in Hall 3 (Lower Level)

Thursday, April 23

SWANA Session

Rooms 1-3 (Upper Level)

1:00 PM-1:10 PM	Moderator Mary Anderson, Bi-County Solid Waste, opens the session
1:10 PM-1:50 PM	Accelerating Landfill Energy Recovery - Septage Bioreactor Landfill Technology This presentation details a bioreactor landfill case history involving the introduction of liquid septage into a municipal solid waste landfill, improving the management of septage and solid waste, while simultaneously creating increased methane gas as a renewable energy source. Andrew J. Querio, P.E., CPESC , EIL (Environmental Information Logistics, LLC) Te-Yang Soong, Ph.D., P.E. , CTI and Associates, Inc.
1:50 PM-2:30 PM	Sediment and Erosion Control: The Landfill Perspective on Regulatory Updates Jason Repsher, P.G. , TDEC - Division of Solid Waste Management
2:30 PM-3:15 PM	Ice Cream Social held in the Exhibit Hall (Lower Level)
3:15 PM-3:55 PM	Analysis of Off-Site Mitigation of Aerosol from Leachate Aeration and Evaporation A methodology for analyzing the off site migration of aerosol generated from leachate evaporation will be presented. The results of this study can be used to optimize evaporator performance at leachate ponds and to minimize the migration and deposition of aerosol to off site locations. Ray Kapahi , NCM Odor Control
3:55 PM-4:35 PM	Detection of Elevated Temperatures in Landfills This presentation will describe the indicators and changes in these indicators for detecting and delineating elevated landfill temperatures. Navid H. Jafari , University of Illinois at Urbana-Champaign
4:35 PM-4:45 PM	Session close

- 1:00 PM-1:10 PM** **Moderator Ashley Holt, P.G., TDEC - Solid Waste Management, opens the session**
- 1:10 PM-2:30 PM** **The Revised Definition of Solid Waste - Understanding Its Impact on Tennessee**
A panel presentation and discussion on the Revised Definition of Solid Waste rule and its probable impacts on Tennessee businesses and organizations.
M. Clark Spoden, Burr & Forman
Greg Young, Burr & Forman
Janet G. Evans, P.E., Eastman Chemical Company
Dwight Hinch, TriAD Environmental Consultants
Wayne Gregory, Tennessee Department of Environment and Conservation
Robert S. Nakamoto, P.E., CHMM, TDEC - Division of Solid Waste Management
Mary Beth Sheridan, U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery
- 2:30 PM-3:00 PM** **Networking Break—Refreshments served in the Exhibit Hall (Lower Level)**
- 3:00 PM-3:20 PM** **Sustainable Disposition of Unneeded Materials and Chemicals at Y-12**
Y-12 utilizes a systematic disposition evaluation process, which focuses on reuse with waste disposal as last resort. Y-12 first tries to identify another use within Y-12, within DOE, within government, through sale to public, through recycle, and finally through waste disposal.
Janice Jackson, Consolidated Nuclear Security, LLC
- 3:20 PM-4:05 PM** **What Can a DOT Compliance Specialist Do For Your Company?**
DOT specialists can increase their value to employers without increasing costs. A DOT-trained individual who is being used only for shipping may be underutilized and could contribute much more to the success of the company. This session will identify other areas in which DOT specialists can use their talents with little or no additional training.
Linda H. Lawhorn, CHMM, CDGP, Edgewater Technical Associates
- 4:05 PM-4:25 PM** **Hazardous Waste Regulatory and Program Update - Key Revisions in the Regulations & Policies**
An update on the current and pending revisions to the hazardous waste regulations and key policies.
Alan Newman, U.S. Environmental Protection Agency (EPA), Region 4
Larry Lamberth, U.S. Environmental Protection Agency (EPA), Region 4
Jacqueline Okoreeh-Baah, TDEC - Division of Solid Waste Management
- 4:25 PM-4:30 PM** **Session Close**
- 5:00 PM-6:30 PM** **Welcome Reception hosted by Republic Services in the Exhibit Hall (Lower Level)**



Thursday, April 23

Hazardous Waste Innovative Technologies Session

Rooms 4-5 (Upper Level)

8:00 AM-8:10 AM	Moderator Clayton Bullington, TDEC - Solid Waste Management, opens the session
8:10 AM-8:40 AM	GPS - Bring Productivity and Efficiency to Your Organization We will look at the history of GPS technology and what organizations are using to be productive and efficient, including real world examples of how GPS helped change the way organizations deliver results to end users. Eric Muncy , Precision Products
8:40 AM-9:10 AM	What You Need to Know When Designing a Remedial Injection Program The presentation details how subsurface imaging can develop a 3-D profile of the site contaminants and hydraulic permeability, permitting development of effective remedial technologies for site remediation. Brad Carlson , Zebra Technical Services
9:10 AM-9:30 AM	Questions/Open Discussion
9:30 AM-10:00 AM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)
10:00 AM-10:30 AM	Strategies and Approaches for Employing Enhanced Reductive Dechlorination and In Situ Chemical Reduction at Challenging Sites This presentation will focus on a discussion of strategies for employing innovative In Situ-Chemical Reduction approaches to treat soil and groundwater. John Valkenburg , PeroxyChem Environmental Solutions
10:30 AM-11:00 AM	Safer, More Effective In Situ Chemical Oxidation (ISCO) Remedial Actions Using Non-Extreme Persulfate Activation to Yield Sustained Secondary Treatment Provect-OX is an ISCO/enhanced bioremediation agent using ferric iron for safer persulfate activation. Wade Meese , Innovative Environmental Technologies, Inc.
11:00 AM-11:30 AM	Chemical Fixation of Priority Heavy Metals in Soil, Sediment and Groundwater In toxic environments, treatment reagents that combine reduction with adsorption and precipitation of heavy metals are advantageous. MetaFix™ reagents represent an entirely new family of products. Patrick Hicks, Ph.D. , PeroxyChem
11:30 AM-11:40 AM	Session close
11:40 AM-1:00 PM	Networking Break—Lunch served in Hall 3 (Lower Level)

Thursday, April 23

Vapor Intrusion Session

Rooms 4-5 (Upper Level)

1:00 PM-1:10 PM	Moderator Ahmet Bulbulkaya, TDEC - Remediation, opens the session
1:10 PM-1:50 PM	A Weight of Evidence for the Vapor Intrusion Pathway Using Conceptual Site Models Using case studies, this presentation will demonstrate the importance of the CSM and a multiple lines of evidence approach in developing an investigation and evaluation approach for vapor intrusion. Nadine Weinberg , ERM
1:50 PM-2:30 PM	Vapor Intrusion – Basic Principles to Late Breaking Research The presentation will cover a brief overview of vapor intrusion principles, methods of collection, and recent results from EPA funded research. Jim Fineis , Atlas Geo-Sampling Company
2:30 PM-3:15 PM	Ice Cream Social held in the Exhibit Hall (Lower Level)
3:15 PM-3:55 PM	Sub-Slab De-Pressurization System (SSDS) for Vapor Intrusion Mitigation This presentation will provide a summary of the design, start-up, and operation of one of the largest single building SSDS in the U.S. to address vapor intrusion concerns associated with volatile organic compounds. Christopher Engler, P.E. , Arcadis U.S., Inc.
3:55 PM-4:35 PM	Vapor Mitigation: One Size Fits ...Few? Vapor intrusion mitigation should eliminate exposure pathways and complement source remediation. Different regulatory policies and site characteristics result in vast differences in system implementation and design. Ryan Jones , Brown and Caldwell
4:35 PM-4:45 PM	Session close

1:00 PM-1:10 PM	Moderator Joseph Sanders, TDEC - Office of General Counsel, opens the session
1:10 PM-1:50 PM	EPA's Proposed Ozone NAAQS This overview and discussion of the proposed standards will examine ways in which both the primary and secondary standards, if finalized, are likely to affect the citizens and businesses of Tennessee. Michael K. Stagg , Waller Lansden Dortch & Davis, LLP Rick Bolton , EnSafe, Inc.
1:50 PM-2:30 PM	Tennessee and the Clean Power Plan This presentation will focus on implications of the Clean Power Plan in Tennessee and explore compliance pathways for the state. Legal issues associated with finalization of the final federal rule and state implementation of the rule will be addressed as well. Steven R. Stout , TDEC - Office of General Counsel Angela Garrone, J.D. , Southern Alliance for Clean Energy Khurshid K. Mehta , Tennessee Valley Authority (TVA), Office of General Counsel
2:30 PM-3:00 PM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)
3:00 PM-3:40 PM	The Civil War Over Water Jurisdiction: New Proposed Waters of the United States The proposed rules defining what constitutes U.S. waters has pitted states against the federal government. This program will discuss the changes, examine specific examples of how the jurisdiction is expanded, and focus on how this may impact the regulated community. Christopher W. Hayes , Waller Lansden Dortch & Davis, LLP William L. Penny , Burr & Foreman Samuel K. Parish, P.G., CPESC , BDY Environmental, LLC David E. Jackson , BDY Natural Sciences Consultants
3:40 PM-4:20 PM	BOOM! Has 9th Circuit Altered the Cannons Eng'g. Landscape for Consent Decrees? A 2014 divided panel reversed District Court approval of 22 CERCLA Consent Decrees, holding the state agency's culpability analysis was inadequately scrutinized and the state environmental agency was provided undue deference. This departure from traditional Superfund Consent Decree reviews will be analyzed. David C. Higney, Esq. , Grant Konvalinka & Harrison, PC
4:20 PM-4:30 PM	Session Close
5:00 PM-6:30 PM	Welcome Reception hosted by Republic Services in the Exhibit Hall (Lower Level)



Thursday, April 23

Environmental Law Session

Rooms 6-7 (Upper Level)

- 8:00 AM-8:10 AM **Moderator Austin Payne, TDEC - Office of General Counsel, opens the session**
- 8:10 AM-8:50 AM **The Definition of Solid Waste - A Discussion of EPA's Final Promulgated Rule**
A presentation and discussion on the Revised Definition of Solid Waste rule and its probable impacts on Tennessee businesses and organizations.
Wayne Gregory, Tennessee Department of Environment and Conservation
Austin Payne, TDEC - Office of General Counsel
- 8:50 AM-9:30 AM **Open Government Primer: Tennessee Public Records Act and Open Meetings Act**
This program will provide an overview of Tennessee's two main "open government" statutes, with discussion on each statute's scope, applicability, and requirements.
Michael K. Stagg, Waller Lansden Dortch & Davis, LLP
Ann V. Butterworth, Esq., Office of Open Records Counsel, Comptroller of the Treasury, State of Tennessee
- 9:30 AM-10:00 AM **Networking Break—Refreshments served in the Exhibit Hall (Lower Level)**
- 10:00 AM-10:40 AM **Best Practices in Environmental Contested Cases**
Practice tips for environmental contested cases in Tennessee will be discussed, from filing to settlement or trial, including updates on current practice under new procedures for permit appeals.
Edward M. Callaway, Waller Lansden Dortch & Davis, LLP
Mary M. Collier, A.L.J., TN Secretary of State, Administrative Procedures Division
Patrick Parker, TDEC - Office of General Counsel
- 10:40 AM-11:20 AM **OSHA Safety & Health Law and Compliance Update and Hot Topics**
This presentation will describe the fundamental roles of OSHA and related state plan agencies, as well as employer requirements under OSHA standards. It will also address the 2015 regulation revisions.
Michael C. Mallen, Miller & Martin PLLC
- 11:20 AM-11:30 AM **Session close**
- 11:30 AM-1:00 PM **Networking Break—Lunch served in Hall 3 (Lower Level)**

Thursday, April 23

Environmental Law Ethics Session

Rooms 6-7 (Upper Level)

- 1:00 PM-1:10 PM **Moderator James C. Wright, Butler, Vines & Babb, opens the session**
- 1:10 PM-2:30 PM **2015 Attorney Professional Conduct Update**
In this interactive program, the audience will use clickers and professional conduct rules to answer questions based on recent attorney ethics issues in cases and reported in the media.
Paula Schaefer, University of Tennessee College of Law
- 2:30 PM-3:15 PM **Ice Cream Social held in the Exhibit Hall (Lower Level)**
- 3:15 PM-4:35 PM **Tennessee Ethics Issues**
This item will provide insight from the Deputy Chief Disciplinary Counsel - Board of Professional Responsibility.
James Vick, Board of Professional Responsibility
- 4:35 PM-4:45 PM **Session close**



Wednesday, April 22		Waste Reduction & Recycling Session	Rooms 8-9 (Upper Level)
1:00 PM-1:10 PM	Moderator Chris Craig, First Tennessee Development District, opens the session		
1:10 PM-2:30 PM	Municipalities Solid Waste Planning - Panel Discussion Representatives from four Tennessee cities will discuss solid waste planning, successful partnerships within their regions, and challenges they anticipate in implementing the 2025 Plan. David Brace , City of Knoxville Public Service Phil Pindzola , Johnson City Public Works Joe Nunes , City of Germantown Neighborhood Services Joey Smith , City of Murfreesboro Solid Waste		
2:30 PM-3:00 PM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)		
3:00 PM-4:20 PM	Risk Management Concerns in the e-Waste Processing & Recycling Sector Those responsible for e-waste must be cognizant of the societal, environmental, and economic impacts of the industry. This presentation will outline the legal and risk exposures to companies in the e-waste stream. Ross Fields , Levitt Group Christopher W. Smith , Greenberg Glusker Fields Claman & Machtinger LLP		
4:20 PM-4:30 PM	Session Close		
5:00 PM-6:30 PM	Welcome Reception hosted by Republic Services in the Exhibit Hall (Lower Level)		
Thursday, April 23		Waste Reduction & Recycling Session	Rooms 8-9 (Upper Level)
8:00 AM-8:10 AM	Moderator Ashby Barnes, TDEC - Solid Waste Management, opens the session		
8:10 AM-9:30 AM	Tennessee's New Solid Waste and Materials Management Plan Representatives of the solid waste and recycling industry, environmental groups, collectors, and manufacturers using recycled content feedstock will discuss impacts and implementation strategies for the Tennessee Solid Waste and Materials Management Plan. Edward M. Callaway , Waller Lansden Dortch & Davis Craig Almanza , Republic Services John F. McFadden, Ph.D. , TN Environmental Council Will Sagar , SERDC		
9:30 AM-10:00 AM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)		
10:00 AM-11:20 AM	MRF Design and Emerging Technologies This panel discussion will include information about optical sorting and related technologies, as well as the design process of two small single stream Materials Recovery Facilities. Ronald Sorenson , Waste Management Matt Harris , Marathon Equipment Morgan Thomas , Marshall County Solid Waste		
11:20 AM-11:30 AM	Session close		
11:30 AM-1:00 PM	Networking Break—Lunch served in Hall 3 (Lower Level)		
Thursday, April 23		Waste Reduction & Recycling Session	Rooms 8-9 (Upper Level)
1:00 PM-1:10 PM	Moderator Seth McCormick, TDEC - Solid Waste Management, opens the session		
1:10 PM-2:30 PM	Hub and Spoke - Cost Savings Items and Increasing Recycling Rates An introduction to "Hub and Spoke" recycling systems and how these systems can be used to improve recycling program efficiency and bring access to commingled recycling to rural areas. Rob Taylor , North Carolina Department of Environment and Natural Resources James Kilgo , Rutherford County Solid Waste (North Carolina) Steve Nanney , Rutherford County Solid Waste (North Carolina)		
2:30 PM-3:15 PM	Ice Cream Social held in the Exhibit Hall (Lower Level)		
3:15 PM-4:35 PM	Construction & Demolition Recycling and Reuse Three recent demolition projects (McClung Warehouse, Baptist Hospital, and the former Lakeshore Mental Health Institute) and their waste management and recycling accomplishments will be discussed. Helen Hennon, P.E. , Quantum Environmental & Engineering Services, LLC Michael D. Hogan , Quantum Environmental & Engineering Services, LLC		
4:35 PM-4:45 PM	Session close		

Wednesday, April 22**Remediation Session****Room 10 (Upper Level)**

1:00 PM-1:10 PM	Moderator Robin Heriges, TDEC - Remediation, opens the session
1:10 PM-1:35 PM	The LID Technology Selection Pyramid: A Green Infrastructure Design Approach A five step Low Impact Development (LID) technology selection approach illustrates how stormwater management designs can be implemented. Redevelopment of a former brownfield site in Chattanooga will serve as the case study for this discussion. Mark Brian Miller , AquaShield, Inc.
1:35 PM-2:05 PM	Recent Brownfields Redevelopment in Nashville Nashville's economy officially crossed the \$100 billion mark in 2013—a new benchmark for local growth. In recent years, the rapid population growth in Nashville has led to an increase in redevelopment projects. This presentation explores some of the projects TDEC has worked on and the associated economic impact. Evan Spann, P.G. , TDEC - Division of Remediation
2:05 PM-2:30 PM	Lessons Learned from the Technetium-99 Release of Winter 2013/2014 During the final demolition of the K-25 building at the Oak Ridge Reservation, a release of technetium-99 occurred to the sewer system. This presentation will cover our lessons learned and those we are still learning. Angel Perkey , TDEC - Division of Remediation, Oak Ridge Office
2:30 PM-3:00 PM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)
3:00 PM-3:45 PM	TDEC Division of Remediation Vapor Intrusion Update Vapor intrusion from a DOR perspective with the latest on the TDEC Vapor Intrusion Flow Chart and DOR's vapor intrusion screening levels, and an overview of the Vapor Intrusion Mitigation (VIM) systems at DOR sites. Charles Jobe , TDEC - Division of Remediation Ahmet Bulbulkaya , TDEC - Division of Remediation
3:45 PM-4:20 PM	Remediation Recap – A Look at Ongoing Projects Across the State Andy Binford , TDEC - Division of Remediation
4:20 PM-4:30 PM	Session Close
5:00 PM-6:30 PM	Welcome Reception hosted by Republic Services in the Exhibit Hall (Lower Level)

Thursday, April 23**Toxic Substances
Session****Room 10 (Upper Level)**

8:00 AM-8:10 AM	Moderator Elizabeth Jean Warner, P.G., TDEC - Solid Waste Management, opens the session
8:10 AM-8:30 AM	Managing Demolition Debris Containing PCBs at the Y-12 National Security Complex This presentation outlines the unique challenges in managing demolition debris in accordance with the TSCA/ Polychlorinated Biphenyls (PCB) regulations and provides a practical strategy for maintaining compliance. Elizabeth Owens , Y-12 National Security Complex Bradley Skaggs , Y-12 National Security Complex
8:30 AM-8:50 AM	Value Optimization During Demolition Remediation and Return of a Closed Manufacturing Property to Beneficial Use Case history describing the progression of a closed manufacturing plant through decontamination, asset recovery, demolition, and environmental closure to resale for beneficial redevelopment. Jerry A. Archer, P.G. , Amec Foster Wheeler
8:50 AM-9:10 AM	Partnering for a Healthier Home This presentation will examine the impact of toxic exposures on Tennesseans within their own homes, discussing recent collaborations such as the Tennessee Healthy Homes Advisory Board and ongoing regional and national projects undertaken by the Healthy Housing Partnership. Bonnie L. Hinds, M.S. , University of Tennessee Extension Martha W. Keel, Ph.D. , University of Tennessee Extension
9:10 AM-9:30 AM	Legal Defensibility of Environmental Laboratory Data A discussion of the accreditation programs, approved methodologies, and available technologies for the analysis of toxic substances to provide the end data user greater confidence in the legal defensibility and understanding of laboratory analytical data. Johnny A. Mitchell , ESC Lab Sciences
9:30 AM-10:00 AM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)

Technical Breakout Sessions

Quick Reference Table

Wednesday Afternoon - April 22, 2015											
	Rooms 1-3 (Upper Level)	Rooms 4-5 (Upper Level)	Rooms 6-7 (Upper Level)	Rooms 8-9 (Upper Level)	Room 10 (Upper Level)	Room 11 (Upper Level)					
	Solid Waste Session	Hazardous Waste & Materials Management Session	Environmental Law Session	Waste Reduction and Recycling Session	Remediation Session						
1:00 p.m.	Moderatr Jason Repsher opens session	Moderatr Ashley Holt, P.G., opens session	Moderatr Joseph Sanders opens session	Moderatr Chris Craig opens session	Moderatr Robin Heriges opens session		1:00 p.m.				
1:05 p.m.							1:05 p.m.				
1:10 p.m.	The Effect of the Proposed NSPS/EG Rules for Landfills - David G. Thorley, Waste Management - Matt K. Slutz, P.E., Weaver Consultants Group	The Revised Definition of Solid Waste - Understanding Its Impact on Tennessee - M. Clark Spoden, Burr & Forman - Greg Young, Burr & Forman - Janet G. Evans, P.E., Eastman Chemical Company - Dwight Hinch, TriAD Environmental Consultants - Wayne Gregory, Tennessee Department of Environment and Conservation - Robert S. Nakamoto, P.E., CHMM, TDEC - Division of Solid Waste Management - Mary Beth Sheridan, U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery	EPA's Proposed Ozone NAAQS: A Discussion of the Proposed Standards and Their Effects on Tennessee Citizens and Industry - Michael K. Stagg, Waller Lansden Dortch & Davis, LLP - Rick Bolton, EnSafe, Inc.	Municipalities Solid Waste Planning - Panel Discussion - David Brace, City of Knoxville Public Service - Phil Pindzola, Johnson City Public Works - Joey Smith, City of Murfreesboro Solid Waste - Joseph Nunes, City of Germantown Neighborhood Services	The LID Technology Selection Pyramid: A Green Infrastructure Design Approach - Mark Brian Miller, AquaShield, Inc.		1:10 p.m.				
1:15 p.m.							1:15 p.m.				
1:20 p.m.							1:20 p.m.				
1:25 p.m.							1:25 p.m.				
1:30 p.m.							1:30 p.m.				
1:35 p.m.							1:35 p.m.				
1:40 p.m.							1:40 p.m.				
1:45 p.m.							1:45 p.m.				
1:50 p.m.							1:50 p.m.				
1:55 p.m.							1:55 p.m.				
2:00 p.m.	Landfill Stability - Causes and Predictors - Steve Batiste, P.E., Brown and Caldwell		Tennessee and the Clean Power Plan - Steven R. Slutz, TDEC - Office of General Counsel - Angela Garrone, J.D., Southern Alliance for Clean Energy - Khurshid K. Mehta, Tennessee Valley Authority (TVA) Office of General Counsel		Recent Brownfields Redevelopment in Nashville - Evan Spann, P.G., TDEC - Division of Remediation Lessons Learned from the Technetium-99 Release of Winter 2013/2014 - Angel Perkey, TDEC - Division of Remediation, Oak Ridge Office		2:00 p.m.				
2:05 p.m.							2:05 p.m.				
2:10 p.m.							2:10 p.m.				
2:15 p.m.							2:15 p.m.				
2:20 p.m.							2:20 p.m.				
2:25 p.m.							2:25 p.m.				
2:30 p.m.							2:30 p.m.				
Networking Break—Refreshments served in the Exhibit Hall											
3:00 p.m.	Final Cover Systems - Design vs. Performance - Steve Batiste, P.E., Brown and Caldwell	Sustainable Disposition of Unneeded Materials and Chemicals at Y-12 - Janice Jackson, Consolidated Nuclear Security, LLC	The Civil War Over Water Jurisdiction: New Proposed Waters of the United States - Christopher W. Hayes, Waller Lansden Dortch & Davis, LLP - William L. Penny, Burr & Foreman - Samuel K. Parish, P.G., CPESC, BDY Environmental, LLC - David E. Jackson, BDY Natural Sciences Consultants	Risk Management Concerns in the eWaste Processing & Recycling Sector - Ross Fields, LeVitt Group - Christopher W. Smith, Greenberg Glusker Fields Claman & Machtinger LLP	Division of Remediation Vapor Intrusion Update - Charles Jobe, TDEC - Division of Remediation - Ahmet Bulbulkaya, TDEC - Division of Remediation		3:00 p.m.				
3:05 p.m.							3:05 p.m.				
3:10 p.m.							3:10 p.m.				
3:15 p.m.							3:15 p.m.				
3:20 p.m.							3:20 p.m.				
3:25 p.m.		What Can a DOT Compliance Specialist Do For Your Company? - Linda H. Lawhorn, CHMM, CDGP, Edgewater Technical Associates				BOOM! Has 9th Circuit Altered the Cannons Eng'g. Landscape for State-Proposed Consent Decrees? - David C. Higney, Esq., Grant Konvalinka & Harrison, PC		Remediation Recap – A Look at Ongoing Projects Across the State - Andy Binford, TDEC - Division of Remediation		3:25 p.m.	
3:30 p.m.										3:30 p.m.	
3:35 p.m.										3:35 p.m.	
3:40 p.m.										3:40 p.m.	
3:45 p.m.										3:45 p.m.	
3:50 p.m.	Shingle Recycling: Managing Collecting, Recycling, and Handling of Asphalt Shingles - Lincoln Young, Ground Up Recycling - Matt Allen, Ground Up Recycling	Hazardous Waste - Key Revisions in the Regulations & Policies - Alan Newman, U.S. EPA - Larry Lamberth, U.S. EPA - Jacqueline Okoreeh-Baah, TDEC - Division of Solid Waste Management				3:50 p.m.					
3:55 p.m.						3:55 p.m.					
4:00 p.m.						4:00 p.m.					
4:05 p.m.						4:05 p.m.					
4:10 p.m.						4:10 p.m.					
4:15 p.m.						4:15 p.m.					
4:20 p.m.	Moderatr closes session		Moderatr closes session	Moderatr closes session	Moderatr closes session	4:20 p.m.					
4:25 p.m.		Moderatr closes session				4:25 p.m.					
5:00 p.m.	5:00 PM-6:30 PM Welcome Reception held in the Exhibit Hall						5:00 p.m.				
Thursday Morning - April 23, 2015											
	Solid Waste Session	Innovative Technologies	Environmental Law Session	Waste Reduction and Recycling Session	Toxic Substances Session	Water Session					
7:30 a.m.	Breakfast served in the Exhibit Hall						7:30 a.m.				
8:00 a.m.	Moderatr Jeff Norman opens session	Moderatr Clayton Bullington opens session	Moderatr Austin Payne opens session	Moderatr Ashby Barnes opens session	Moderatr Elizabeth Jean Warner, P.G., opens session	Moderatr Michael Atchley opens session	8:00 a.m.				
8:05 a.m.							8:05 a.m.				
8:10 a.m.	Leachate Spray Mist Evaporation System - Nelson Lawrence Breeden, P.E., Waste Connections Inc. - Robert Bachus, Ph.D., P.E., Geosyntec Consultants - Steve Keylor, Waste Connections-Meadow Branch Landfill	GPS - Bring Productivity and Efficiency to Your Organization - Eric Muncy, Precision Products	The Definition of Solid Waste - A Discussion of EPA's Final Promulgated Rule - Wayne Gregory, Tennessee Department of Environment and Conservation - Austin Payne, TDEC - Office of General Counsel	Tennessee's New Solid Waste and Materials Management Plan - Edward M. Callaway, Waller Lansden Dortch & Davis, LLP - Craig Almanza, Republic Services - Will Sagar, Southeast Recycling Development Council - John F. McFadden, Ph.D., Tennessee Environmental Council	Managing Demolition Debris Containing PCBs at the Y-12 National Security Complex - Elizabeth Owens & Bradley Skaggs, Y-12 National Security Complex Value Optimization During Demolition Remediation and Return of a Closed Manufacturing Property to Beneficial Use - Jerry A. Archer, Amec Foster Wheeler Partnering for a Healthier Home - Bonnie L. Hinds, M.S., University of Tennessee Extension - Martha W. Keel, Ph.D., University of Tennessee Extension	Antimicrobial Pesticides for the Removal of Bacteria from Stormwater Runoff - Mark Brian Miller, AquaShield, Inc. Building a Sustainable and Focused Water Resource Program for the State of Tennessee - Vena Jones, TDEC - Division of Water Resources Industrial Pretreatment Requirements - Yalasha Moore, TDEC - Division of Water Resources	8:10 a.m.				
8:15 a.m.								8:15 a.m.			
8:20 a.m.								8:20 a.m.			
8:25 a.m.								8:25 a.m.			
8:30 a.m.								8:30 a.m.			
8:35 a.m.		What You Need to Know When Designing a Remedial Injection Program - Brad Carlson, Zebra Technical Services					Open Government Primer: The Tennessee Public Records Act and Open Meetings Act - Michael K. Stagg, Waller Lansden Dortch & Davis, LLP - Ann V. Butlerworth, Esq., Office of Open Records Counsel, Comptroller of the Treasury, State of Tennessee			8:35 a.m.	
8:40 a.m.											8:40 a.m.
8:45 a.m.											8:45 a.m.
8:50 a.m.											8:50 a.m.
8:55 a.m.											8:55 a.m.
9:00 a.m.	Landfill Bioreactor Waste Mining and Reclamation - Williamson County Landfill - Nancy Zion, Williamson County Solid Waste - Jo Kendall House, P.E., P.G., House Engineering, LLC - Kevin Brian Wolfe, Ph.D., P.E., Civil & Environmental Consultants, Inc.					9:00 a.m.					
9:05 a.m.							9:05 a.m.				
9:10 a.m.							9:10 a.m.				
9:15 a.m.							9:15 a.m.				
9:20 a.m.							9:20 a.m.				
9:25 a.m.						9:25 a.m.					
9:30 a.m.	Networking Break—Refreshments served in the Exhibit Hall						9:30 a.m.				

Technical Breakout Sessions

Quick Reference Table

Thursday Morning - April 23, 2015 Continued											
	Rooms 1-3 (Upper Level)	Rooms 4-5 (Upper Level)	Rooms 6-7 (Upper Level)	Rooms 8-9 (Upper Level)	Room 10 (Upper Level)	Room 11 (Upper Level)					
	Solid Waste Session cont.	Innovative Technologies cont.	Environmental Law Session cont.	Waste Reduction and Recycling Session cont.	Toxic Substances Session cont.	Water Session cont.					
10:00 a.m.	<div>Design of Landfill Sediment Ponds for Optimal Performance - Rob Wither, P.E., Promus Engineering LLC</div> <div>Construction Challenges of a Coal Ash Landfill Expansion - George "Willy" White, Civil & Environmental Consultants, Inc. - Brian Wolf, P.E., Civil & Environmental Consultants, Inc.</div> <div>Moderator closes session</div>	Strategies and Approaches for Employing Enhanced Reductive Dechlorination and In Situ Chemical Reduction at Challenging Sites - John Valkenburg, PeroxyChem Environmental Solutions	Best Practices in Environmental Contested Cases - Edward M. Callaway, Waller Lansden Dortch & Davis, LLP - Mary M. Collier, J.D., TN Secretary of State, Administrative Procedures Division - Patrick Parker, TDEC - Office of General Counsel	MRF Design and Emerging Technologies - Ron Sorenson, Waste Management - Matt Harris, Marathon Equipment - Morgan Thomas, Marshall County Solid Waste	TVA Kingston Recovery Project - April Michelle Cagley, Tennessee Valley Authority - Michael J. Steele, Stantec Consulting Services Inc.	Tennessee's Nutrient Reduction Framework - Stephanie Durman, Tennessee Clean Water Network - Jennifer Dodd, TDEC - Division of Water Resources	10:00 a.m.				
10:05 a.m.								10:05 a.m.			
10:10 a.m.								10:10 a.m.			
10:15 a.m.								10:15 a.m.			
10:20 a.m.								10:20 a.m.			
10:25 a.m.								10:25 a.m.			
10:30 a.m.								10:30 a.m.			
10:35 a.m.								10:35 a.m.			
10:40 a.m.			Safer, More Effective ISCO Remedial Actions Using Non-			OSHA Safety & Health Law and Compliance Update and Hot Topics - Michael C. Mallen, Miller & Martin PLLC		TSCA Multi-Media Enforcement - Adrienne White, TDEC - Division of Solid Waste Management, Toxic Substances Program	Plant Optimization of Biological Nutrient Removal in Tennessee - Karina Bynum, MSCE, P.E., TDEC - Division of Water Resources	10:40 a.m.	
10:45 a.m.			Extreme Persulfate Activation to Yield Sustained Secondary Treatment - Wade Meese, Innovative Environmental Technologies, Inc.						10:45 a.m.		
10:50 a.m.			Chemical Fixation of Priority Heavy Metals in Soil, Sediment and Groundwater using MetaFix™ Reagents - Patrick Hicks, Ph.D., PeroxyChem					Q&A panel discussion featuring this session's presenters		10:50 a.m.	
10:55 a.m.										10:55 a.m.	
11:00 a.m.										11:00 a.m.	
11:05 a.m.										11:05 a.m.	
11:10 a.m.									11:10 a.m.		
11:15 a.m.									11:15 a.m.		
11:20 a.m.						Moderator closes session	Moderator closes session	Moderator closes session	Moderator closes session	11:20 a.m.	
11:25 a.m.										11:25 a.m.	
11:30 a.m.	Networking Break—Lunch served in Hall 3						11:30 a.m.				
Thursday Afternoon - April 23, 2015											
	SWANA Session	Vapor Intrusion Session	Ethics Session	Waste Reduction and Recycling Session	Hot Topics Session	Water / Air					
1:00 p.m.	Moderator Mary Anderson opens session	Moderator Ahmet Bulbulkaya opens session	Moderator James C. Wright opens session	Moderator Seth McCormick opens session	Moderator Donovan Grimwood opens session	Moderator Michael Atchley opens session	1:00 p.m.				
1:05 p.m.							1:05 p.m.				
1:10 p.m.	<div>Accelerating Landfill Energy Recovery for Tennessee Landfills - Using Septage Bioreactor Landfill Technology - Andrew J. Querio, P.E., CPESC, EIL (Environmental Information Logistics, LLC) - Te-Yang Soong, Ph.D., P.E., CTI and Associates, Inc.</div> <div>Sediment and Erosion Control: The Landfill Perspective on Regulatory Updates - Jason Repsher, P.G., TDEC - Division of Solid Waste Management</div>	Use of Conceptual Site Models to Develop a Weight of Evidence for the Vapor Intrusion Pathway - Nadine Weinberg, ERM	2015 Attorney Professional Conduct Update - Paula Schaefer, University of Tennessee College of Law	Hub and Spoke - Cost Savings Items and Increasing Recycling Rates - Rob Taylor, North Carolina Department of Environment and Natural Resources - James Kilgo, Rutherford County Solid Waste (North Carolina) - Steve Nanney, Rutherford County Solid Waste (North Carolina)	Technological and Life Cycle Assessment of Organic Waste Management Odor Control Technologies - Brajesh Kumar Dubey, Ph.D., University of Northern Pine Snake Survey, Polk County, Tennessee - James A. Evans, Stantec Consulting Services, Inc.	Stormwater Management Associated with Landfill Activities - Robert Karesh, TDEC - Division of Water Resources - Valerie McFall, TDEC - Division of Water Resources	1:10 p.m.				
1:15 p.m.									1:15 p.m.		
1:20 p.m.									1:20 p.m.		
1:25 p.m.									1:25 p.m.		
1:30 p.m.									1:30 p.m.		
1:35 p.m.									1:35 p.m.		
1:40 p.m.									1:40 p.m.		
1:45 p.m.									1:45 p.m.		
1:50 p.m.						Vapor Intrusion – Basic Principles to Late Breaking Research - Jim Fineis, Atlas Geo-Sampling Company			Opportunities for Small Businesses - Crystal Applewhite, TDEC - Small Business Environmental Assistance Program - Donovan Grimwood, TDEC - Small Business Environmental Assistance Program - Charles R. Morris, USDA Rural Development, Small Business Loans and Grants - Walter N. Perry, III, U.S. Small Business Administration, Small Business Loans	In-Situ Groundwater Remediation of Chlorinated VOCs using BOS 100® - William Lawrence Brab, C.P.G., P.G., AST Environmental, Inc. - Jane Allan, Ph.D., Apex Companies	1:50 p.m.
1:55 p.m.										1:55 p.m.	
2:00 p.m.										2:00 p.m.	
2:05 p.m.										2:05 p.m.	
2:10 p.m.										2:10 p.m.	
2:15 p.m.										2:15 p.m.	
2:20 p.m.										2:20 p.m.	
2:25 p.m.										2:25 p.m.	
2:30 p.m.										2:30 p.m.	
3:15 p.m.	<div>Analysis of Off-Site Mitigation of Aerosol from Leachate Aeration and Evaporation - Ray Kapahi, NCM Odor Control</div> <div>Detection of Elevated Temperatures in Landfills - Navid H. Jafari, University of Illinois at Urbana-Champaign</div> <div>Moderator closes session</div>	Sub-Slab De-Pressurization System for Vapor Intrusion Mitigation - Christopher Engler, Arcadis U.S., Inc. - Rachel Saari, Arcadis U.S., Inc.	Tennessee Ethics Issues - James Vick, Board of Professional Responsibility	Construction & Demolition Recycling and Reuse - Helen Hennon, P.E., Quantum Environmental & Engineering Services, LLC - Michael D. Hogan, Quantum Environmental & Engineering Services, LLC	The Petroleum Brownfields Initiative Roadmap to Revitalization - Channing Bennett, U.S. Environmental Protection Agency, Region 4		Air Quality Management Issues In Tennessee - Quincy N. Slyke III, TDEC - Division of Air Pollution Control	3:15 p.m.			
3:20 p.m.									3:20 p.m.		
3:25 p.m.									3:25 p.m.		
3:30 p.m.									3:30 p.m.		
3:35 p.m.									3:35 p.m.		
3:40 p.m.									3:40 p.m.		
3:45 p.m.									3:45 p.m.		
3:50 p.m.									3:50 p.m.		
3:55 p.m.						Vapor Mitigation: One Size Fits ...Few? - Ryan Jones, Brown and Caldwell			Hatchery Creek Stream Restoration Project - A Unique Opportunity - Oakes Routt, P.E., Stantec Consulting Services, Inc.	Review of Air Pollution Control Regulatory and Permitting Issues Applicable to Landfills In Tennessee - Hernan Flores, TDEC - Division of Air Pollution Control	3:55 p.m.
4:00 p.m.										4:00 p.m.	
4:05 p.m.										4:05 p.m.	
4:10 p.m.										4:10 p.m.	
4:15 p.m.										4:15 p.m.	
4:20 p.m.										4:20 p.m.	
4:25 p.m.										4:25 p.m.	
4:30 p.m.										4:30 p.m.	
4:35 p.m.										4:35 p.m.	
4:40 p.m.										4:40 p.m.	

Thursday, April 23

Toxic Substances Session cont.

Room 10 (Upper Level)

- 10:00 AM-10:40 AM TVA Kingston Recovery Project**
This presentation will discuss the current status of the project, which is nearing closure. It will include details on the landfill closure, environmental restoration, and future activities.
April Michelle Cagley, P.E., Tennessee Valley Authority
Michael J. Steele, P.E., Stantec Consulting Services Inc.
- 10:40 AM-11:00 AM TSCA Multi-Media Enforcement**
This presentation will highlight TSCA compliance monitoring and enforcement activities associated with an east Tennessee facility from the initial complaint to the indictment, the final settlement and ultimate convictions. The strict liability of TSCA asbestos and PCB regulations will be reviewed.
Adrianne White, TDEC - Division of Solid Waste Management, Toxic Substances Program
- 11:00 AM-11:20 AM Q&A panel discussion**
Featuring speakers from this session's presentations.
- 11:20 AM-11:30 AM Session close**
- 11:30 AM-1:00 PM Networking Break—Lunch served in Hall 3 (Lower Level)**

Thursday, April 23

Hot Topics Session

Room 10 (Upper Level)

- 1:00 PM-1:10 PM Moderator Donovan Grimwood, TDEC - Office of External Affairs, opens the session**
- 1:10 PM-1:30 PM Technological and Life Cycle Assessment of Organic Waste Management Odor Control Technologies**
As more look towards implementing organic waste management programs or upgrading existing ones, composting and anaerobic digestion (A.D.) facilities are emerging as a popular choice. This presentation provides a technological and life cycle assessment of some odor control technologies that can be implemented.
Brajesh Kumar Dubey, Ph.D., University of Guelph School of Engineering
- 1:30 PM-1:50 PM Northern Pine Snake Survey, Polk County, Tennessee**
As required by federal and state law, Stantec conducted surveys for several threatened and endangered species in Polk County, Tennessee for a proposed TDOT road project which would run through the Ocoee National Forest. This presentation will discuss why the survey was required along with its methods and results and how they may impact the potential road project.
James A. Evans, Stantec Consulting Services, Inc.
- 1:50 PM-2:30 PM Opportunities for Small Businesses**
This session will focus on the factors found to be most essential in the success of small businesses in Tennessee. It will provide attendees with tools and knowledge of programs designed to help them in navigating the complexity of rules and regulation, loans, or grant programs.
Crystal Applewhite, TDEC - Office of External Affairs, Small Business Environmental Assistance Program
Donovan Grimwood, TDEC - Office of External Affairs, Small Business Environmental Assistance Program
Charles R. Morris, USDA Rural Development, Small Business Loans and Grants
Walter N. Perry, III, U.S. Small Business Administration, Small Business Loans
- 2:30 PM-3:15 PM Ice Cream Social held in the Exhibit Hall (Lower Level)**
- 3:15 PM-3:55 PM The Petroleum Brownfields Initiative Roadmap to Revitalization**
The presentation will focus on strategic planning used to revitalize communities for economic development and address the reuse of abandoned "Petroleum-Brownfields". It will also identify funding, tools and the successful reuse of petroleum contaminated properties.
Channing Bennett, U.S. Environmental Protection Agency, Region 4
- 3:55 PM-4:35 PM Hatchery Creek Stream Restoration Project - A Unique Opportunity to Maximize Trout Habitat, Create Recreational Opportunities and Provide Mitigation Credits**
When water level fluctuations impaired trout spawning within the Cumberland River, the Kentucky Department of Fish and Wildlife Resources hired the design/build team of Stantec and EcoGro/Ridgewater to design and build an extension of Hatchery Creek 6,000 feet downstream to create a self-sustaining trout stream capable of supporting trout spawning.
Oakes Routt, P.E., Stantec Consulting Services, Inc.
- 4:35 PM-4:45 PM Session close**

8:00 AM-8:10 AM	Moderator Michael Atchley, TDEC - Water Resources, opens the session
8:10 AM-8:30 AM	Antimicrobial Pesticides for the Removal of Bacteria from Stormwater Runoff This presentation will explore the essential features of FIFRA pesticide law and EPA regulations for using antimicrobial pesticides in stormwater, as well as current antimicrobial practices. Critical distinctions between chemical-based pesticide products and mechanical-based pesticide devices will be explained. Mark Brian Miller , AquaShield, Inc.
8:30 AM-9:00 AM	Building a Sustainable and Focused Water Resource Program for the State of TN The State had implemented a 401 certification for many years, developed wetland functional assessment models, and regulated compensatory mitigation. However, it lacked a clear and concise path for focused management and protection of Tennessee's water resources. This presentation will discuss TDEC's goals for improvement through the EPA's Wetland Program Development Grant Program. Vena Jones , TDEC - Division of Water Resources
9:00 AM-9:30 AM	Industrial Pretreatment Requirements This presentation will discuss pretreatment requirements for industries, with a focus on landfills. Yatasha Moore , TDEC - Division of Water Resources
9:30 AM-10:00 AM	Networking Break—Refreshments served in the Exhibit Hall (Lower Level)
10:00 AM-10:50 AM	Tennessee's Nutrient Reduction Framework This presentation will cover the importance of managing nutrients and the challenges associated with reducing nutrient loading from point and non-point sources. It will outline TN's current approach to nutrient management. Stephanie Durman , Tennessee Clean Water Network Jennifer Dodd , TDEC - Division of Water Resources
10:50 AM-11:20 AM	Plant Optimization of Biological Nutrient Removal in Tennessee TDEC DWR supports the operator lead nutrient removal optimization as a first step for wastewater facilities to reduce Nitrogen and Phosphorus loading to receiving streams. The Fleming Training Center hosted a workshop for Tennessee Wastewater operators in November. Three plants are undergoing optimization with TDEC's support for diagnostics and technical consultations. Karina Bynum, MSCE, P.E. , TDEC - Division of Water Resources
11:20 AM-11:30 AM	Session close
11:30 AM-1:00 PM	Networking Break—Lunch served in Hall 3 (Lower Level)

1:00 PM-1:10 PM	Moderator Michael Atchley, TDEC - Water Resources, opens the session
1:10 PM-1:50 PM	Stormwater Management Associated with Landfill Activities This presentation provides an overview of stormwater management requirements related to landfill construction and operation activities. Robert Karesh , TDEC - Division of Water Resources Valerie McFall , TDEC - Division of Water Resources
1:50 PM-2:30 PM	In-Situ Groundwater Remediation of Chlorinated VOCs using BOS 100® Case study presenting successful remediation at dry cleaning facility using BOS 100®, a specialized catalyst consisting of activated carbon impregnated with metallic iron, designed to trap and rapidly degrade chlorinated solvents. William Lawrence Brab, C.P.G., P.G. , AST Environmental, Inc. Jane Allan, Ph.D. , Apex Companies
2:30 PM-3:15 PM	Ice Cream Social held in the Exhibit Hall (Lower Level)



3:15 PM-3:55 PM

Air Quality Management Issues In Tennessee

The presentation will focus on Tennessee's attainment status with the National Ambient Air Quality Standards, and other federal air quality initiatives, including the Clean Power Plan, interstate transport of air pollutants, a new startup, shutdown and malfunction SIP revision, regional haze and miscellaneous federal control measures that should bring about continued improvement in air quality.

Quincy N. Styke III, TDEC - Division of Air Pollution Control

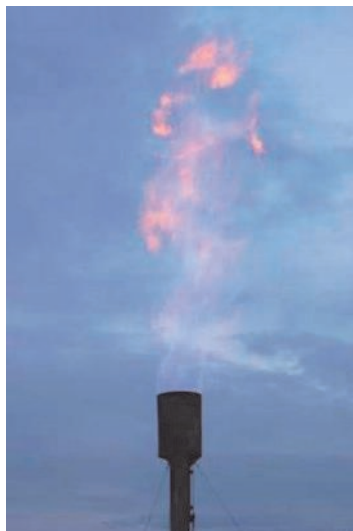
3:55 PM-4:30 PM

Review of Air Pollution Control Regulatory and Permitting Issues Applicable to Landfills In Tennessee

The presentation will focus on Air Pollution Control Regulations and Permitting Requirements for Landfills in Tennessee. Regulatory and permitting issues for landfills and associated sources such as internal combustion engines, boilers and process heaters, asbestos in landfills will be discussed.

Hernan R. Flores, Jr., P.E., TDEC - Division of Air Pollution Control

4:35 PM-4:45 PM

Session close**Mobile App**

Download our mobile app on your Android or Apple iOS device for an interactive view of our program. The app includes details like speaker bios that you can't find elsewhere, plus allows you to favorite sessions or presentations you might like to attend. Mobile app developed by BDY Environmental with support from Burr & Forman.

**Internet Access**

Need to get online to download the app? We're pleased to offer WiFi access within the Convention Center this year. Log on to SSID **ESOS** and enter password **esos2015** to connect.



- 8:15 AM-8:30 AM Morning Address**
Patrick J. Flood, P.E., TDEC - Division of Solid Waste Management
- 8:30 AM-9:00 AM Tennessee Legislative Update**
 Information regarding legislation which would affect TDEC and was considered during the 109th General Assembly will be provided.
Emily H. Urban, TDEC - Office of General Counsel
- 9:00 AM-10:30 AM TDEC Bureau of Environment Program Updates**
 Six TDEC divisions will present updates on their on their work and then take questions from the audience.
Barry Stephens, Director,
 TDEC - Air Pollution Control Division
Billy Freeman, Deputy Director for Field Operations,
 TDEC - Division of Radiological Health
Steve Goins, Senior Deputy Director for Central Office Operations,
 TDEC - Division of Remediation
Patrick J. Flood, P.E., Director,
 TDEC - Division of Solid Waste Management
Stan Boyd, Director,
 TDEC - Division of Underground Storage Tanks
Tisha Calabrese, Director,
 TDEC - Division of Water Resources
- 10:30 AM-10:50 AM Open Discussion with TDEC Representatives - Question and Answer Session**
- 10:50 AM-11:00 AM Closing Remarks & Feedback Survey Prize Drawing**
 As the conference comes to a close, two lucky attendees will be selected to receive a prize from among those who have turned in their completed feedback surveys.
Patrick J. Flood, P.E., TDEC - Division of Solid Waste Management
- 11:00 AM Conference Adjournment**



About TDEC

The Tennessee Department of Environment and Conservation (TDEC) exists to enhance the quality of life for citizens of Tennessee and to be stewards of our natural environment. The department is the chief environmental and natural resource regulatory agency in Tennessee. It has delegated responsibility from the U.S. EPA to regulate sources of air pollution, solid and hazardous waste, radiological health issues, underground storage tanks, and water pollution, water supply & groundwater.

Six TDEC divisions will be presenting updates on recent developments within their programs and taking questions from attendees during the Closing Session.

Additional TDEC technical staff will be on site throughout the Environmental Show of the South and are looking forward to meeting you. Please stop by the TDEC Permit Writers booth outside the Exhibit Hall to find a technical staff member who would be happy to answer your questions one on one.



Don't forget!

We want to hear from everyone—attendees, exhibitors, speakers, moderators, booth workers—what did you think about the conference?

Turn in your Feedback Survey at On-Site Registration, the Exhibit Hall Break Area, or the collection box in the Closing Session.

Three drawings will be held to thank you for your time and effort to help us continue improving. The Exhibitors Drawing will be held Thursday as part of the Ice Cream Social, but the other two drawings will take place during the closing session on Friday. You must be in attendance on Friday to win the iPad Air 2 sponsored by Stantec, but anyone who completes and returns their feedback survey can win two nights at a Tennessee State Park!



Exhibitor Information

A+D Environmental Services, Inc. (417)

..... www.adenviro.com
Providing full-service environmental solutions! Maximum protection. Minimum risk. Total piece of mind.

Action Environmental (101)

..... www.action-environmental.com
Action Environmental provides environmental services and industrial services which have a broad application across many industries. Additionally, we provide specialty services which include industrial painting and coating, pipeline and terminal services, rail car services, and remediation services.

Agru America, Inc. (401)

..... www.agruamerica.com
Agru America, Inc. is the world's leading manufacturer of flat die extrusion geomembranes, geonets, geocomposites, geotextiles, geo clay liners, and concrete protective liners. Agru America is part of Alois Gruber GmbH, with production facilities in Austria, the U.S., Germany, China and India, and distribution in over 80 countries worldwide.

Alliant Corporation (604)

..... www.alliantcorp.com
Alliant provides professional services in three areas of expertise: Environmental/Waste Mgmt, Occupational Safety & Health, and Project Controls. As a Service-Disabled Veteran Owned Small Business, Alliant offers services to government agencies, construction and manufacturing, and power and utilities.

Amec Foster Wheeler (413)

..... www.amecfw.com
Amec Foster Wheeler is an international company with clear vision, values and goals. Our team of experts includes scientists, environmental consultants, engineers and project managers. Amec Foster Wheeler Environment & Infrastructure, Inc. employs approximately 40,000 professionals in over 400 offices in 50 countries worldwide.

American Environmental Group (609)

..... www.aegl.net
American Environmental Group is a wholly owned subsidiary of Tetra Tech (NASDAQ:TTEK), and the Company provides the highest quality specialty services to solid waste, environmental, energy, mining and industrial clients. Visit us at: www.aegl.net.

Amplified Geochemical Imaging, LLC (412)

..... www.agisurveys.net
Amplified Geochemical Imaging's, LLC (AGI) Environmental Services provide AGL Universal Samplers (formerly known as GORE® Modules), which detect a broad range of organic compounds in virtually any geological setting. The samplers collect compounds in soil gas, indoor air, groundwater and sediment.

Appalachian Environmental Resources, Inc. (807)

..... www.aertrn.com
Appalachian Environmental Resources, Inc. has provided waste management, environmental consulting and training services for the Southeast Region since 2000. We also operate a TDEC Permit-By-Rule processing facility in Johnson City, Tennessee for the management of nonhazardous waste.

ARCADIS (601)

..... www.arcadis-us.com
ARCADIS is a leading, global, knowledge-driven service provider, active in the fields of infrastructure, water, environment, and buildings. We provide consultancy, design, engineering, and management services to public and private clients, governments and companies, across the nation and the globe.

ARIES ENERGY (317)

..... ariesenergy.com
ARIES Energy is for organizations who want to gain control of their energy costs. We reduce our customers' vulnerability to rising energy costs, by offering affordable turnkey, reduction and environmentally-friendly power generation solutions. Energy Monitoring, LED Lighting, Power Conditioning, Solar PV, Biomass Gasification and Grant Writing

Asphalt Shingle Grinding Service (518)

..... recyclingandprocessing.com
Turn Large Stockpiles of Waste Shingles into usable, high quality Recycled Asphalt Shingles (RAS). As Innovators in the industry and with over 20 years experience, Asphalt Shingle Grinding Service, LLC uses the right combination of shingle recycling equipment, manpower and experience, to produce "The Right Product for The Right Price, The First Time on The First Pass."

AST Environmental (712)

..... www.astenv.com
AST Environmental, Inc. is a multi-disciplinary environmental remediation and contracting company. Our primary purpose is to provide environmental solutions in an effective, timely, safe and cost efficient manner. In other words, AST will work diligently to complete projects on time, within budget, without incident, while achieving the established remedial goals for a particular site.

Atlas Geo-Sampling Company (207)

..... www.atlas-geo.com
Atlas Geo-Sampling Company is the premier vapor intrusion and drilling firm in the Southeast. Services include vapor intrusion sampling, direct push sampling, chemical injection and monitoring well installation.

Aulick Chemical Solutions (809)

..... aulickchemical.com
Aulick Chemical Solutions is an industry leader providing custom solutions for hydrogen sulfide (H₂S) prevention, odor control, and is committed to enhancing drinking water quality through innovative technology.

Barge Waggoner Sumner & Cannon, Inc. (304)

..... www.bargewaggoner.com
BWSC provides environmental permitting and design for municipal and industrial solid waste landfills. BWSC also provides ecological services such as wetland delineation, stream determination, endangered and threatened species surveys, and restoration and mitigation plans and designs.

Beacon Environmental Services, Inc. (308)

..... www.beacon-usa.com
Beacon Environmental Services is a DoD ELAP and ISO/IEC 17025 accredited laboratory that specializes in the analysis of soil gas and air samples. Beacon provides site characterization and vapor intrusion assessment support on projects throughout Tennessee for environmental consultants and TDEC.

Benefactors Capital, LLC (203)

..... www.benefactorscapital.com
Benefactors Capital buys property with environmental issues. We have been active in this arena for almost 20 years. We acquire the site, manage the environmental clean-up, and return the property to productive re-use. We have acquired a wide variety of contaminated sites from coast to coast.

Blackhawk Technology (307)

..... www.blackhawkco.com
Blackhawk Technology is a leading provider of high-quality piston pumps, with the drive motor at surface level, above the wellhead. The design technology has evolved to enable pumping of virtually any liquid, regardless of density or toxicity.

Brown and Caldwell (806)

..... www.browncaldwell.com
Brown and Caldwell provides environmental engineering and consulting services for solid and hazardous waste projects from a network of 50 offices and more than 1,400 professionals across the U.S. Our clients include both private companies and public agencies, and our goal is to deliver value and exceed expectations.

Caraustar Recycling (303)

..... www.caraustar.com
Caraustar Industries, Inc. is one of North America's largest integrated manufacturers of 100% recycled paperboard and converted paperboard products. We are a socially responsible corporation, committed to environmentally sound practices and dedicated to providing customers with outstanding value through innovative products and services.

Exhibitor Information

Cascade Drilling, L.P. (409)

..... cascadedrilling.com
The nation's largest provider of environmental drilling services including DPT, Rotary (Mud & Air), and Rota-sonic. Cascade also provides direct sensing and chemical injection services for site investigation & remediation.

CETCO (800)

..... cetco.com
CETCO has been developing sustainable solutions for building, drilling, and environmental applications for over 25 years. We provide products and expertise for the world's growing infrastructure needs. CETCO has strategically positioned our people, manufacturing and research facilities to ensure that we exceed the needs of our clients. Backed by our team of experts in the lab and in the field, we provide peace of mind so that your project is successful in every phase from planning to completion.

Chase Environmental Group, Inc. (501)

..... www.chaseenv.com
Chase Environmental Group provides environmental and radioactive field services including: bioremediation, underground storage tank services, treatment system installation and maintenance, monitoring well installation, direct push services and radiological decontamination and decommissioning. Licensed Tennessee Remedial Services Contractor.

Civil & Environmental Consultants, Inc. (605)

..... www.cecinc.com
Civil & Environmental Consultants, Inc. (CEC) provides comprehensive industry-focused consulting services that advance our clients' strategic business objectives. CEC provides a diverse scope of civil, geotechnical, ecological and environmental consulting services to all sectors of the solid waste management industry. With more than 25 years of experience, CEC has 19 offices including Knoxville and Nashville.

Clean Harbors Environmental Services, Inc. (514)

..... cleanharbors.com
Clean Harbors is the leading provider in environmental, energy and industrial services throughout North America. We serve a diverse customer base across a broad range of vertical markets, which includes a majority of the Fortune 500 companies, numerous federal, state, provincial and local governmental agencies, and through its Safety-Kleen subsidiary, over 200,000 small and medium sized businesses.

CMI Equipment Sales, Inc. (613)

..... www.cmiequip.com
Providing equipment, parts and service to waste industry management for three decades.

Consolidated Pipe & Supply Co. Inc. (416)

..... consolidatedpipe.com
Consolidated Pipe is dedicated to providing & designing products for the HDPE & PVC pipe Industry. We offer solutions & services for all applications in the landfill industry.

Continental Aerial Surveys, Inc. (616)

..... conaers.com
Continental Aerial Surveys has earned a reputation in the aerial survey and aerial mapping industry for providing accurate high quality products and delivering those products on schedule. We have extensive experience nationwide with both government and private landfills.

Cornerstone Environmental Group (615)

..... www.cornerstoneeg.com

CRI Recycling Service (606)

..... www.crireycling.com
CRI Recycling is an innovator in the Oil Filter and Absorbent recycling business. Through our patented process we are able to extract Oils and Grease from absorbent materials to maximize oil recycling. This closed loop process allows CRI to meet your company's sustainability needs while supporting ISO initiatives.

CTI Engineers Inc. (415)

..... www.ctiengr.com

EarthCon Consultants, Inc. (106)

..... www.earthcon.com
EarthCon is an environmental engineering, consulting, and remediation firm that helps clients achieve EH&S compliance, manage resources including permitting; conduct investigations, remediation and abatement activities; manage liabilities including the allocation of environmental reserves; improve remediation system performance and achieve site closure.

ECOFLO, Inc. (602)

..... www.ECOFLO.com
ECOFLO, Inc. is a Veteran Owned Small Business providing hazardous & non-hazardous waste treatment, storage and disposal at its RCRA Part-B TSDF located in Greensboro, NC. ECOFLO offers lab pack services, drummed & bulk waste disposal and industrial services for government agencies & private business.

Elkins Earthworks LLC (104)

..... www.elkinsearthworks.com
Elkins Earthworks, LLC (EEW) is a leading environmental monitoring equipment design and manufacturing firm producing instruments and software for the landfill gas (LFG) industry. Based in Medina, Ohio, we sell our products to landfill owners, operators, consulting engineers and environmental regulators across North America.

Empirical Laboratories (617)

..... Empirlabs.com
Empirical Laboratories, LLC has been providing comprehensive environmental laboratory testing services locally and at the Federal level for over 48 years. Certified as a SB, EDWOSB, we are centrally located in Nashville, TN. For a project-specific quote, Call 877-345-1113 Email sales@empirlabs.com.

EnSafe Inc. (112)

..... www.ensafe.com
Founded in Memphis, Tennessee, in 1980, EnSafe has been providing superior consulting services to our customers for 35 years. As a global provider of Environmental Management and Planning, Design Engineering, Environmental Restoration, Natural & Water Resources, Health & Safety, and Technology Solutions, our tenet has been and remains that our clients' needs come first. We use our creativity to custom-tailor solutions specific to our client's particular challenge.

Environmental Enterprises, Inc. (801)

..... eeenv.com
Environmental Enterprises Inc. (EEI) is a full service Treatment, Storage and Disposal facility. EEI was founded in 1976 to service the greater Cincinnati, Ohio area and has expanded to cover the east and southeast with service centers in Pennsylvania and Virginia. EEI provides a full line of disposal services to a diverse clientele in industry, government and academia. Lab Packing, precious metals recovery, aerosol can disposal and hazmat removal are a few of our specialties.

Environmental Standards, Inc. (504)

..... www.envstd.com
Environmental Standards, Inc. is a privately-held environmental consulting firm specializing in chemistry quality assurance, environmental analytical laboratory auditing, consulting geosciences, third-party field auditing, and information management. Local office in Knoxville, TN.

ESC Lab Sciences (209)

..... www.esclabsciences.com

Evergreen Tank Solutions (102)

..... www.evergreentank.com
Evergreen Tank Solutions are providers of temporary liquid and solid storage solutions, pumps and filtration, and non hazardous transportation services.

Exhibitor Information

EWS Alabama, Inc. (612)

..... www.ewsalabama.com
EWS Alabama is a EPA permitted RCRA Part B TSDF. We provide a range of environmental services including disposal, recycling, waste to energy, lab packs and much more. EWS has the network to transport, treat/dispose of all of your hazardous/non-hazardous materials.

Excel TSD of Tennessee, LLC (519)

..... www.exceltsd.com
EXCEL is a fully permitted, full service T/S/D facility located in Memphis, TN. We offer the satisfaction and confidence that your waste characterization, packaging, transportation, recycling and disposal needs are consistently met with professional skill and personal service. We are permitted for the handling of hazardous and non-hazardous wastes including liquids, sludges and consumer products.

First Response Environmental Group (110)

..... frenvgroup.com

Frost Environmental Services, LLC (614)

..... www.frostenvironmental.com

Gatlinburg Crafts (802-804)

..... www.gatlinburgcrafts.com
Representatives from the Great Smoky Arts & Crafts Community will be on site with some of their wares for sale.

Georgia Baler and Compactor (306)

..... www.georgiabalerandcompactor.com
Georgia Baler and Compactor specializes in the sales, service, installation, and refurbishing of Waste and Recycling Equipment and Parts. Our factory trained technicians and fully equipped fleet of repair and install trucks service locations across the Southeast.

GeoSearch (509)

..... www.geo-search.com
GeoSearch provides customers with fast, accurate, constructive information to help assess and manage environmental risk. GeoSearch is a complete source for all environmental due diligence needs including ASTM Environmental Database Reports, Historic Aerials, City Directory Research, Fire Insurance Maps, Lien and Title Search Investigations and more all in one place.

Geosyntec Consultants (109)

..... geosyntec.com
Geosyntec Consultants, a consulting and engineering firm, works with private and public clients to address changes involving our environment, natural resources, and civil infrastructure.

Golder Associates Inc. (600)

..... www.golder.com
Golder is one of the premier environmental and engineering consulting firms operating in the Southeast having successfully completed some of the largest and most complex environmental and geotechnical engineering projects in the region. Companies have trusted Golder's expert engineers and scientists for over 50 years to increase efficiency and develop sustainable solutions on their projects.

Ground Up Recycling (803)

..... www.groundupshingle.com
Ground Up is the state's largest shingle recycling company with three locations in Middle TN. They specialize in turning shingles into a product for asphalt paving.

GSE Environmental (500)

..... www.gseworld.com
GSE Environmental is a manufacturer of geosynthetic containment systems used in the waste management, mining, oil and gas, water and wastewater industries. Our HDPE-based products include geomembranes, geonets, geocomposites, GCLs, and geotextiles.

HEPACO (400)

..... www.hepaco.com
HEPACO is a environmental contractor specializing in Emergency Spill Response/ Remediation Services/Waste Handling/Demolition/Facility Decontamination/ Tank Cleaning/Vacuum Truck Services/Asbestos Lead & Mold Abatement/ Indoor Air Quality/Training and much more.

Heritage-Crystal-Clean (407)

..... crystal-clean.com
Heritage-Crystal Clean is a leading provider of parts cleaning, used oil, re-refining, and hazardous and non-hazardous waste services as well as other products and services pertaining to the environmental services market. We have the best compliance record in the industry and we intend to maintain this record by having a trained staff to assist our customers with the management of collecting, transporting and disposal of used solvent products and wastes.

Hill Services Industrial and Environmental (700)

..... hillshere.com
Hill Services is the #1 trusted Mid-South leader in Industrial Cleaning and Environmental Emergency Response Services providing complete solutions to fit your needs. We specialize in Hydro Blasting/Excavation, Liquid/Dry Vacuum Services, CIPP/Main Line Video Inspections, Dry Ice Blasting, Chemical Cleaning covering minor projects up to and including major outages/ shutdowns in all industries.

Hole Products (708)

..... www.holeproducts.com
Hole Products is a global leader in providing high performance drilling supplies, tools and equipment to the direct push, environmental, geotechnical, geothermal, HDD, mineral exploration, rotary and sonic drilling industries.

Jim's Tank Service, LLC (202)

..... www.jimstankservice.com
Jim's Tank Service, LLC together with its sister companies, ATM 011 Company and Wastewater Solutions, Inc., provides a full service approach to your industrial and environmental needs. We provide emergency response services, industrial vacuuming, hydro-blasting, confined space, and roll-off services. JTS is OSRO approved.

Joyce Engineering, Inc. (503)

..... www.joyceengineering.com
JOYCE is a full-service environmental consulting firm. We specialize in providing engineering and environmental solutions, construction phase services and training for our clients throughout the southeastern United States. Our engineering and environmental personnel serve a client base composed of local governments, regional authorities, and private industrial operations. For 30 years we have proven to be a financially stable and reliable resource for our clientele.

KS Ware & Associates, LLC (205)

..... www.kswarellc.com
K. S. Ware & Associates is a woman owned small business that provides Geotechnical, Hazardous Materials and Environmental Consulting, CEI, Materials Testing and Inspection services to Owners and other A/E firms within the Transportation, Federal, Municipal, and Private market segments. Offices are located in TN, KY, and FL.

Landmarc / Sligo (302)

..... www.lmenvsys.com
Landmarc Environmental Systems is a specialized environmental construction and service firm. Services include gas piping, drilling, pumping, and electrical (controls, instrumentation, SCADA). Sligo Systems is a systems integrator, specializing in innovative pumping systems. Sligo offers rugged pump designs with advanced controls to provide simplicity of use and ensure maximum uptime.

Landtec North America (108)

..... www.landtecna.com
LANDTEC, an ISO accredited company, manufactures a complete suite of landfill products. We have been primarily developing these products to obtain accurate measurement of well field data.

Exhibitor Information

Leavitt Group of San Diego (701)

.....www.leavitt.com

Liberty Tire (502)

.....www.libertytire.com

Liberty Tire Recycling is the premier provider of tire recycling services in the United States. By reclaiming more than 33 percent of the nation's discarded tires, Liberty Tire annually transforms more than 140 million tires into raw materials for smart, sustainable products that improve people's lives. Liberty Tire is a revolutionary American conservation enterprise – from coast to coast, and from whole tire to end product.

LiquiTube Marketing International (507)

.....www.liquitube.net

LiquiTube is a premium, heavy duty, preventative maintenance tire sealant scientifically developed for commercial and industrial tires that are subject to hard and heavy use.

Littlejohn (404)

.....www.leainc.com

Littlejohn is a multi-disciplined professional services firm providing innovative sustainable solutions for industrial and public clients. Merging with S&ME January 2015, we have 35 offices locations and are a Top 100 Engineering Firm. Services include environmental consulting, civil/municipal engineering, and H&S/industrial hygiene.

Marion Environmental, Inc. (120)

.....www.marionenv.com

Marion is an environmental consulting company that concentrates on regional business. Marion's areas of service include Phase I, II, III's, Emergency Response, Industrial Services, Waste Management, Hazardous & Non-Haz Hauling.

McMahon Truck Centers of Nashville (403)

.....mcmahontrucks.com

McMahon Truck Centers of Nashville is a full service Mack Truck dealership dedicated to all of your municipal truck needs - including a full array of parts and service for all makes and models. We're part of the McMahon Truck Centers' family of dealerships - operating heavy and medium duty commercial truck businesses at 8 locations throughout 5 states. We pair leading edge support solutions together with strong, premium vehicles.

Microbac Laboratories, Inc. (305)

.....www.microbac.com

Full service chemical and microbiological analysis, supporting industries, municipalities, regulators, consultants, and researchers. DOD QSM, NELAC, ISO accredited.

Mills Environmental Insurance Services, LLC (608)

.....millseis.com

Mills EIS is an independent insurance agency specializing in insurance and bonding for contractors in the specialty environmental and renewable energy sector. We provide our customers with the right coverage for the best possible price, along with a high level of customer service and ongoing support not offered from many companies.

Monitoring Control and Compliance Inc. (105)

.....landfillgasom.com

Monitoring Control and Compliance, Inc. (MCC) is a landfill gas consulting company that specializes in landfill gas operation and maintenance services, landfill gas system design and construction, construction quality assurance, and leachate system maintenance services.

Municipal Equipment, Inc. (300)

.....www.municipalequipmentinc.com

Tennessee's new choice for refuse / recycling / compaction equipment from New Way, Labrie, Galbreath, Marathon and Wastequip. Whether you want an automated side loader or on-site service - we've got the reach.

Neptune Automated Wash Solutions (515)

.....www.neptunesystems.org

NorthStar Contracting Group, Inc. (808)

.....www.NorthStar.com

NorthStar is the world's most comprehensive environmental solutions company. We bring ANSWERS to complex projects. Our services

include Phase I/II ESA; Assessment & Remediation; Disaster Response; Nuclear Facility Decommissioning; Water Resource Management; Construction & Civil Engineering; Asbestos Abatement; and Facility Demolition.



Pace Analytical Services (419)

.....www.pacelabs.com

Paradigm Software LLC (516)

.....www.paradigmsoftware.com

The CompuWeigh System outweighs the competition and is the software standard in the weighing and routing industry. It is fully customizable to meet your operational needs. The CompuWeigh System will be the last data management software your company will ever need to buy.

Perkins Manufacturing (716)

.....www.perkinsmfg.com

The leader in lifting devices, because that is all we do!

PeroxyChem (319)

.....www.peroxychem.com/markets/environment/soil-and-groundwater

Our portfolio of proven in situ chemical oxidation (ISCO), in situ chemical reduction (ISCR), and bio-remediation technologies address both organic compounds and heavy metals. We have successfully treated millions of liters of groundwater, and more than ten million metric tons of impacted soils, sediments, and industrial process wastes on five continents around the globe.

PHG Energy (317)

.....www.phgenenergy.com

PHG Energy's commercially proven waste-to-energy technology helps customers by converting municipal waste, which would otherwise be landfilled, to a synthetic fuel through a clean gasification process. No incineration. No odor. The resulting combustible gas can be utilized like natural gas to produce electric or thermal power.

Pine (517)

.....www.pine-environmental.com

Pine is the industry leader for 20 years offering rental and sales equipment for Environmental Monitoring, Health & Safety Monitoring and Protection, Non-Destructive Testing, Remote Visual Inspection and Continuous Emissions Monitoring. We offer local support with a robust nationwide network.

Plastic Fusion Fabricators (118)

.....www.plasticfusion.com

Plastic Fusion provides and installs containment liners and related products, such as HDPE covers for anaerobic lagoons to collect and utilize biogas. PFF fabricates HDPE structures such as manholes and pump stations. PFF products also include thermoplastic lining systems for concrete structures.

Quantum Environmental & Engineering Services, LLC (607)

.....QE2LLC.COM

QE2 provides environmental services, engineering, design, cleanup and support services. We work in the private and public sectors providing cost-effective, response oriented problem solving; specialty environmental products; industrial facility support, and development-related services.

Raven Industries (618)

.....www.ravenefd.com

Raven is an innovative 50 year manufacturer of Geomembrane Liners and Covers. Complete line of EVOH Gas Barriers and Reinforced Membranes in smooth or textured from 20-80 mils provide the latest technology in containment solutions to control odors, methane and harmful VOCs.

Exhibitor Information



Red River Waste Solutions, LP (204)

..... rrws.com

Red River Waste Solutions LP is a nationally recognized 3rd generation family owned business that has been in operation since 1953. RRWS currently operates in (7) states that also include (2) TN operations in Nashville and Union City. RRWS offers residential, commercial, industrial and military base; waste collection and disposal services.

Republic Services (313)

..... www.republicservices.com



**REPUBLIC
SERVICES**

Research Solutions Group (506)

..... researchsolutionsgroup.com

As a full-service chemical distributor, Research Solutions is committed to providing quality solutions for your waste management needs, from minimizing waste to providing waste collection and disposal. We take the guesswork out of federal, state and local regulations. We also offer regulatory and environmental consulting.

RockTenn Recycling (703)

..... www.rocktenn.com

S&ME, Inc. (406)

..... www.smeinc.com

S&ME delivers common sense consulting services that create economic value for our clients. Our environmental professionals are focused on safely providing technically excellent services, governed by unquestioned integrity, and aimed at cost-effectively accomplishing our clients' objectives.

SCS Field Services (418)

..... www.scsengineers.com

SCS Field Services provides Operations, Maintenance and Monitoring services for Landfill Gas extraction/control systems. A division of SCS Engineers, one of the largest privately held, employee owned environmental firms in North America. Our Tennessee regional office is located in Murfreesboro, TN.

Shield Engineering, Inc. (100)

..... www.shieldengineering.com

Shield Engineering is a full-service geotechnical, materials testing and environmental consulting firm that provides QA/QC services to municipal, commercial and industrial clients in the United States and abroad. Shield maintains offices in Charlotte, North Carolina and Knoxville, Tennessee.

Southeastern Tank Inc (206)

..... www.southeasterntank.com

Southeastern Tank, Inc. is an authorized distributor of Aquastore and Columbian TecTank bolted and welded steel storage tanks for municipal/ industrial water and wastewater systems, leachate storage and commercial fire protection. We provide factory certified storage tank installations including complete foundations, primary and secondary containment, designs and piping.

Stantec (405)

..... www.stantec.com



Stantec

At Stantec, our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental

sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe.

Stringfellow, Inc. (714)

..... www.stringfellow.bz
Stringfellow, Inc. represents quality manufacturers of Environmental and Truck Equipment. Our inventory consists of reliable, innovative products that will give you years of trouble-free service at competitive prices. You'll be amazed at the variety of products we offer. See on our website: www.stringfellow.bz or contact us at 1-800-832-4404. Stringfellow, "WHERE THERE IS NO SUBSTITUTE FOR QUALITY SERVICE."

SWS Environmental Services (705)

..... www.swsenvironmental.com

tarpARMOR® (619)

..... www.tarparmor.com

Start Saving Money Today! Add years to the life of your landfill by using tarpARMOR® tarps, TDS and our patented tarpLOX™ system. The tarpLOX™ structural support system dramatically improves the covering efficiency of your tarps. Extend tarp life and get full coverage by using tarpLOX™.

TDEC Division of Remediation (Hallway)

..... tn.gov/environment/remediation.shtml

The TDEC Division of Remediation (DoR) uses the Hazardous Waste Remedial Action Fund, the Voluntary Cleanup Oversight and Assistance Fund and the Drycleaner Environmental Response Fund to investigate and cleanup environmental problems caused by releases to the environment and uses practical and effective remedies to stabilize, remediate, contain, monitor, and maintain these sites in order to eliminate the threat to public health, safety, and the environment.



TDEC Regulatory Staff (Hallway)

..... tn.gov/environment
TDEC's technical staff is on site and happy to meet you. Check out our booth schedule to find just the right person to discuss your unique questions or comments.

TDEC Toxic Substances Program (107)

..... www.tn.gov/environment/solid-waste/solid-waste_toxic-substances.shtml

The TDEC Toxic Substances Program (TSP) works under state and federal statutes to protect the inhabitants of Tennessee from environmental and health hazards associated with lead, asbestos & polychlorinated biphenyls (PCBs). Activities conducted by the Toxic Substances Program to promote compliance and/or enforce regulations applicable to these substances include compliance inspections, compliance assistance, and community outreach.

Tennessee Recycling Coalition (805)

..... www.tennessee recyclingcoalition.org

The TRC is a 501(c)3 non-profit organization dedicated to promoting recycling and sustainable materials management practices in the State of Tennessee. We are a coalition of many industries, companies, and individuals networked together to raising recycling as the standard.

Terracon Consultants Inc. (200)

..... www.terracon.com

Terracon provides practical solutions to environmental, facilities, geotechnical and materials engineering challenges. With more than 140 offices nationwide, we provide local expertise backed up by national resources to achieve project success on time and on budget.

TestAmerica Laboratories (512)

..... www.testamericainc.com

TestAmerica Laboratories, Inc. is recognized as the leading environmental testing firm in the United States. Operations include a nationwide network of over 90 locations. TestAmerica provides innovative technical expertise and comprehensive analytical testing services.

Exhibitor Information



TN Chapter of SWANA (704)

.....swanachapters.org/tennessee
TN SWANA is a group of solid waste professionals who are committed to advancing the practice of economically and environmentally sound solid waste management in Tennessee.

TPM Group (114)

.....www.tpm-group.com

Tradebe (201)

.....www.tradebeusa.com

TRADEBE is a global leader in sustainable waste management using patented, innovative technology. We recycle over 60% of the waste we process using "green" technology. Our patented "SDS" technology offers generators an effective, cost-efficient method for recycling organic solid waste to recover viable products as an alternative to waste disposal.

TriAD Environmental Consultants, Inc. (414)

.....www.triadenvironment.com

TriAD Environmental Consultants, Inc., provides innovative, cost-effective solutions to clients facing environmental problems. Our expertise includes solid/hazardous waste management, RCRA/CERCLA permitting/remediation, hydrogeologic investigations, storm water management, hydrologic determinations, compliance assistance, SPCC Plan preparation, and environmental assessments. A privately owned small business, TriAD has provided quality service to industry and government since 1996.

Tri-State Drilling, LLC (603)

.....www.TSDrilling.com

A small business providing professional drilling services based in Chattanooga TN. Providing services in southeastern United States. Services include Geotechnical, Environmental, Mineral Investigation and Water Resources.

UA Safe State (116)

.....alabamasafestate.ua.edu

UA Safe State-Environmental offers programs to promote environmental compliance, performs asbestos, lead and mold testing and consultation, and serves as the state agency for accrediting lead-based paint and asbestos individuals and training providers.

United States Environmental Services (402)

.....www.usgroup.com

Through three specialized service lines—Industrial, Environmental and Specialty Services—USES provides a range of capabilities and depth of expertise that no competitor in our market can match, all from a single, trusted provider. From routine industrial and maritime cleaning services to emergency response for disasters of any scale, USES is the company you can count on for efficiency, professionalism and a total commitment to safety.

US Ecology (103)

.....www.usecology.com

For over 62 years, US Ecology's dedicated team has set the industry standard for comprehensive environmental services. No matter how big or small, US Ecology's technical innovation, flexibility and commitment to the Earth will take on each liability for the long-term. We specialize in Hazardous Waste Treatment & Disposal, Radioactive Disposal, Total Waste Management, Recycling, Remediation, Emergency Response, Industrial Services, Transportation and Wastewater Treatment.

Vacuum Truck Rentals LLC (706)

.....www.vactruckrental.com

We offer 24/7 nationwide service for rentals of environmental and industrial style vacuum equipment, sewer jetters, roll-offs, tankers, and similar type units.

Valicor Environmental Services (513)

.....www.valicor.com

Valicor is an environmental company that specializes in non-hazardous waste treatment and removal. Valicor is ISO certified at all of its locations, ensuring proper handling of all waste materials. Focusing on a variety of products, Valicor is set up to take care of all of your environmental needs.

Veolia North America (505)

.....www.veolionorthamerica.com

Warmouth Environmental Services, Inc. (702)

Waste Connections of Tennessee, Inc. (301)

.....wasteconnectionstn.com

Waste Connections of Tennessee, Inc. is a fully integrated solid waste services company. We service commercial, industrial and residential trash and recycling customers, operating Class I landfills and transfer stations.

Waste Industries (208)

.....www.wasteindustries.com

Waste Industries maintains an industry-leading approach to sustainable waste practices through efficient management of its resources and early adoption of technology. The incorporation of technologies that include compressed natural gas fleets, our state of the art Diesel Hydraulic-Hybrid vehicles introduced and operated in Tennessee, and our gas to energy facilities at our Sampson County landfill has helped ensure Waste Industries holds true to its mission of ongoing sustainable efforts in local communities.

Waste Management (309-408)

.....www.wm.com

Wind Defender, LLC (707)

.....www.wind-defender.com

Wind Defender, LLC is the sole provider of Wind Defender in the United States. Our system is a new and innovative solution for ballasting exposed geomembranes. Superior to traditional ballasting methods, Wind Defender installs faster, last longer, is reusable, requires little to no maintenance, and is aesthetically pleasing.

Winter Systems (508)

.....www.winter-systems.com

Winter Systems is a division of The Winter Construction Company and is based in Norcross, Georgia. We are a general contractor with specialty trade self-performance capabilities that performs the construction of facilities that restore, protect or enhance the environment. We perform projects throughout the Southeast for industry and government.



Worldwide Equipment, Inc (718)

.....www.thetruckpeople.com

Our municipal specialists can provide trucks for all applications. Mack, Volvo, Kenworth, and Hino chassis are available. Exclusive NJPA financing! Make sure to ask about our Municipal Rotation Auction Program! Let us help you write your specs!

Wright Brothers Contracting, Inc. (709)

.....www.wbcc.com

Wright Brothers is dedicated to "getting the job done" and "done right." We utilize teams of qualified construction professionals to deliver a quality product, on time and within budget. We want our customer to have a pleasurable experience and be utmost satisfied.

Be sure to visit the Heavy Equipment Display area in the Exhibit Hall, featuring





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